

## KENTUCKY DIVISION FOR AIR QUALITY'S RESPONSES TO COMMENTS RECEIVED FROM U.S. EPA ON WILLIAM C. DALE POWER STATION PROPOSED/FINAL TITLE V PERMIT

### Significant Comments

1. Unit 1, condition 4.a.; Unit 2, condition 4.a; Unit 3, condition 4.a., allow the facility to choose between two monitoring scenarios for determining compliance with the facility's allowable sulfur dioxide (SO<sub>2</sub>) emission rate. The first method requires the facility to monitor SO<sub>2</sub> emission using the unit's continuous emissions monitoring systems (CEMS). The second proposed SO<sub>2</sub> monitoring scenario is the use of a daily as-fired sample for determining compliance with the SO<sub>2</sub> allowable emission rate. The facility must decide which monitoring method to utilize for determining compliance with the allowable SO<sub>2</sub> emission rate. The Region concurs with the first approach but will need additional information to determine if daily as-fired sampling would be acceptable for determining compliance in the event that the facility chooses the second approach.

### **Response:**

The division concurs with this comment and the second monitoring scenario (daily fuel sampling) has been removed from the permit. The language stating "CEMS shall be installed, calibrated, maintained and operated to measure for sulfur dioxide emissions and either oxygen or carbon dioxide emissions" shall remain. Please note that since Unit 4, condition 4.a. had both requirements in it, this condition was also corrected based on your above comment.

2. *Emission Units 01 and 02, Emission Limitation 2.(b)* - These conditions limit emissions from units 01 and 02 to no more than 20 percent opacity, except for a period of six consecutive minutes in any sixty minutes during which opacity of 40 percent is allowed. However, this is inconsistent with the Kentucky SIP. Regulation 401 KAR 61:015, Section 4(3)(a) states that for cyclone or pulverized fired indirect heat exchangers, a maximum of 40 percent opacity shall be permissible for not more than two consecutive minutes in any sixty consecutive minutes. Since unit 01 is a coal-fired cyclone unit and unit 02 is a pulverized-coal wall-fired unit, Section 4(3)(a) applies. Therefore, these conditions should be changed to only allow 40 percent opacity for only a maximum of two consecutive minutes in any sixty consecutive minutes. One possible remedy for this situation is to make this condition state-only enforceable and insert the following language in the permit conditions:

"This permit shall become federally-enforceable upon the effective date of EPA's approval of this regulation into the Kentucky State Implementation Plan."

### **Response:**

The Regulation that the comment refers to is no longer enforceable by the State. This regulation was replaced by a revision on April 1, 1984 and the current language must remain in the permit as issued. EPA requested that additional language be added stating that the regulation was state-enforceable only. The following italicized language has been added to Section B of the permit where 61:015 is applicable.

*“Regulation 401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984) applicable to an emission unit with a capacity of more than 250 mm BTU per hour and commenced before August 17, 1971. This regulation is state-enforceable only until such time as the effective date of an EPA rulemaking approving this regulation into the federally-approved Kentucky State Implementation Plan.”*

3. Emission Units 01 and 02 (Indirect Heat Exchangers): For periodic monitoring of particulate emissions, Condition B.4.d. requires the source to initiate inspections and repairs whenever any six minute average opacity value exceeds the opacity standard. This condition also requires compliance demonstration via stack testing at the end of each quarter in which COM data show excursions for five percent or greater of the quarter. Using the applicable 40 percent opacity standard as the action level for particulate emissions may not be protective of the applicable mass emission limit. To provide reasonable assurance of compliance, an opacity action level (probably less than 40 percent) could be added to the permit along with corrective action measures to be taken when deviations are noted. Another option would be parametric monitoring of the control equipment. A brief justification of the approach selected should be provided in the Statement of Basis.

**Response:**

The Division acknowledges the comment and it will be addressed in the Statement of Basis in future permits.

**General Comments**

1. Please add the following language to the general permit conditions so as to effectively incorporate the Phase II Acid Rain permit and application into the title V permit:

“The Acid Rain permit is a portion of the title V permit. The Phase II permit application (including the Phase II NO<sub>x</sub> compliance plan and averaging plan, if applicable) is a binding and enforceable portion of the Acid Rain permit, and the owners and operators of the source must comply with the standard requirements and special provisions set forth in the Acid Rain permit application.”

**Response:**

The following language has been added to Section G, Subsection (d)2 Acid Rain Program Requirements as suggested.

The source shall comply with all requirements and conditions of the Title IV, Acid Rain Permit (A-98-013, ATTACHMENT C) and the Phase II permit application (including the Phase II NO<sub>x</sub> compliance plan and averaging plan, if applicable) issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

2. Section G, condition #16 states that “all previously issued construction and operating permits are hereby null and void.” This sentence should be changed to more accurately reflect Kentucky’s combined construction/operating permit program to read as follows:

“All previously issued construction and operating permit are hereby **subsumed** into this permit”

**Response:**

The division concurs with this comment and the above language has been incorporated in Section G, Condition #16.

3. Emission Units 01 and 02: Please clarify the word “representative” in the third sentence of Condition B.4.d. Apparently, stack tests are to be conducted while operating under conditions that are representative of conditions that existed when excursions were documented during the quarter. However, this is left to interpretation (e.g., it could be interpreted to mean representative of the average opacity during the quarter).

**Response:**

The division acknowledge your comment regarding clarification of the word representative. However , the division has concerns regarding the utility’s’s ability to duplicate the conditions that existed during an excursion or that the division would want to require them to test under such conditions. For example, the division does not see a need to test if the unit temporarily lost its control equipment or under conditions that would damage the unit. It is the division intent that the appropriate operating conditions would be established in the compliance test protocol which is required by the permit prior to any testing. Therefore, the division has determined that it is not necessary to make the requested change at this time.